# NREL National Renewable Energy Laboratory

### **Innovation for Our Energy Future**



Join us for a "bonus" seminar in our series of "brown bag" seminars, sponsored by the **National Renewable** Energy Laboratory and the U.S. Department of Energy (DOE). Each seminar is held at NREL's Washington office with a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.





# The Future of Geothermal Energy: Impact of Enhanced Geothermal Systems (EGS)

An analytical seminar presented by DOE/EERE's Office of Planning, Budget, and Analysis and NREL's Strategic Energy Analysis Center

#### **Jeff Tester**

Massachusetts Institute of Technology

#### Thursday, March 1, 2007

Noon – 1 p.m. (in Washington, D.C. - bring your lunch) 10 – 11 a.m. (videoconference in Golden, Colo.)

In September 2005, the Massachusetts Institute of Technology (MIT) was commissioned to conduct a study regarding energy recovery from enhanced/engineered geothermal systems (EGS). MIT convened an 18-member panel of experts to analyze the resource base, status of the technology, and the economics of geothermal energy. The panel calculated the geothermal potential in the United States, critically analyzed and evaluated work on the technology.

potential in the United States, critically analyzed and evaluated work on the technology since the mid-1970s in the United States and abroad, and made realistic estimates of anticipated costs related to expected demand for base-load electric power.

During this seminar, leff Tester of MIT will discuss some of the recommendations from the

During this seminar, Jeff Tester of MIT will discuss some of the recommendations from the report, starting with demonstrations of EGS reservoir stimulation technology at three to five sites within or on the edges of existing geothermal fields. He'll also discuss the need for a comprehensive exploration, research, development, and demonstration program involving the Department of Energy, U.S. Geological Survey, the Department of Defense, and other agencies, which could help further geothermal energy as a major electricity supplier for the nation.

**Jeff Tester** is the H.P. Meissner Professor of Chemical Engineering at MIT. For three decades, he has been involved in chemical engineering process research as it relates to renewable and conventional energy extraction and conversion, and environmental control technologies. He has published extensively in the energy area with more than 185 papers and seven coauthored books. Tester's other appointments have included director of MIT's Energy Laboratory (1989-2001), director of MIT's School of Chemical Engineering Practice (1980-1989), and a group leader in the Geothermal Engineering Group at Los Alamos National Laboratory (1974-1980). He also is a member of the advisory board of the National Renewable Energy Laboratory. Tester received a B.S. and M.S. with distinction in chemical engineering in 1966 and 1967 at Cornell, and a Ph.D. in chemical engineering at MIT in 1971.

## Golden, Colo., information

1617 Cole Blvd., Golden, Colorado Building 15, Conference Room 375

Please contact Lynne Fenn at lynne\_fenn@nrel.gov or 303-384-7439

# Washington, D.C., information

901 D Street SW (adjacent to the Forrestal Building) or 370 L'Enfant Promenade. Ninth Floor.

Please contact Wanda Addison, of Midwest Research Institute (MRI), at wanda addison@nrel.gov or 202-646-5278

If you are interested in participating in the seminar via conference call or Internet conferencing, please contact Wanda Addison, of MRI, at wanda\_addison@nrel.gov or 202-646-5278; or Lynne Fenn at lynne\_fenn@nrel.gov or 303-384-7439 for instructions.